IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant: Henry H. Jenkins

Examiner: O. Flores Sanchez

Art Unit: 3724

Serial No: 09/580,412

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For: STEEL RULE DIE AND STEEL RULE

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Commissioner for Patents
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FOURTH SUPPLEMENTAL APPEAL BRIEF

Dear Sir:

In response to the June 20, 2005 action, applicant responds as follows.

BRIEF HISTORY

This Fourth Supplemental Appeal brief is being filed to address the Examiner's Action dated June 20, 2005 wherein the Third Supplemental Appeal Brief was criticized as not conforming to 37 CFR 41.37. The Third Supplemental Appeal Brief was filed in response to the Examiner's Action dated January 12, 2005 wherein prosecution was reopened and new grounds of rejection of Claims 7-25 were set forth. These new grounds of rejection are extensive and will not be repeated here but will be treated individually further in this brief. Suffice it to say that sixteen

(16) new grounds of rejection are involved and include seven (7) references. The reopening came about as a result of Applicant's Second Supplemental Appeal Brief filed October 19, 2004.

The Second Supplemental Appeal Brief was filed October 19, 2004 in response to the Examiner's Action dated October 13, 2004 wherein it was maintained the previous brief (Supplemental Brief) was defective. The Second Supplemental Appeal Brief incorporated everything from the Supplemental Brief and made the corrections requested in the Examiner's Action dated October 13, 2004.

An appeal in this case was filed April 19, 2002 from a final action dated March 8, 2002. The appeal was briefed by applicant on May 10, 2002 and the Examiner in an action dated July 25, 2003 advised applicant the appeal brief was defective for the reasons stated and advised applicant of the need for a complete new brief. Applicant filed such new brief on August 3, 2002 under the designation "AMENDED NEW APPEAL BRIEF". The Examiner's answer was filed on October 23, 2002 and in this Answer the rejection of claims 1-6 was abandoned and the rejection of claims 7-25 was maintained for the reasons stated in the answer. Applicant filed a Reply Brief on October 29, 2002.

In an action dated September 23, 2003 the Board remanded the case to the Examiner to correct and clarify the record consistent with the Board's remarks contained therein. The Examiner issued an action dated April 13, 2004 as a result of the Board's action of September 23, 2003 in which claims 1-6 were allowed and claims 7-25 were rejected on new grounds. This new rejection was that claims 7-13 were unpatentable over Johnson (U.S. 5,676,032) in view of Sandford (U.S. 6,085,625) under 35 U.S.C. 103(a)

and claims 14-25 were anticipated by Johnson (U.S. 5,676,032).

Applicant, in the action of April 13, 2004, was given the choice of filing a reply to the rejections or requesting reinstatement of the appeal. Applicant requested reinstatement of the appeal and filed the Supplemental Brief directed by the Examiner. In order that the board does not have to refer back and forth between previously filed briefs and the Supplemental Brief, an attempt was made to incorporate everything relevant into the Supplemental Brief.

REAL PARTY IN INTEREST

The real party in interest is Henry H. Jenkins, the named inventor.

RELATED APPEALS AND INTERFERENCES;

There are no other appeals or interferences which will directly affect or have a bearing on the Board's decision in this pending appeal.

STATUS OF THE CLAIMS:

The status of Claims 7-25 which are under appeal and which are found in the attached appendix is they have all been rejected in the action dated January 12, 2005.

STATUS OF AMENDMENTS

No amendments have been made to the claims or the description in the prosecution of this application. The Examiner has objected to Claims 1, 7 and 11 in the recitation "a steel rule in said slots" and maintains the recitation should be "a plurality of steel rules in said slots." Applicant does not agree with this objection and maintains the present language is clear and unambiguous.

SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention solves a problem found in the art which can be broadly stated as expensive steel rule dies (p2, ln 6) used for example in cutting substrates in the paper or packaging industry. In the blister packaging industry it is conventional to have a plurality of identical blisters carrying a product attached to a large piece of cardboard or substrate. It is normally necessary to separate these blisters into discrete individual products to be presented to the purchasing public. This procedure is normally carried out by the use of steel rule dies (p1, lns 9-14).

The construction of steel rule dies to cut the substrate into pieces having square or 90 degree corners is relatively inexpensive however the substrate so cut leaves the corners easily bent and rendered unattractive to the purchasing public (p1, lns 14-20). Arguably the most attractive corners to be cut are rounded corners however to construct a steel rule die to accomplish this requires the skills of an experienced die maker (p2, lns 1-11).

The present invention solves this problem by the use of a novel steel rule die 26 which can be constructed from a steel member (70A, 70B) claimed in claims 7, 9, 11, 14, 16, 18, 20, 22 and 24 and as shown for example in Figures 7-11 and 15 (p4, ln 20-p5 ln 4) which extends generally along a longitudinal axis and which has its opposite ends 76, 78 extending at a 45 degree angle to the longitudinal axis (p3, ln 17- p4, ln 6). The opposite ends of the steel rule extend on opposite sides of the referenced longitudinal axis (See particularly Figs. 8 and 9). This construction enables the quick and relatively inexpensive construction of a steel rule die 26 as illustrated in Figures 2-6 (p4, lns 13-19) and Figures

12-15 (p5, lns 6-16).

The die 26 (p6, ln 11) as claimed in claims 7, 9 and 11 includes a metal plate 36 (p6, ln 17), a top board 40 (p6, ln 17) and a plurality of slots 66 (p7, ln 18) in the top board 40. Steel rules 70 (p7, ln 19) (different lengths 70A, 70B) are located in the slots and have a bottom portion 74 (p8, ln 9) adjacent plate 36 and a top portion 72 (p8, ln 9) formed into a cutting edge 80 (p8, ln 10). As seen for example in Figs 8 and 9 the rule of claims 14, 16, 18, 20, 22 and 24 extends on what has been referred to as on a longitudinal axis and has first and second end portions 76, 78 (p8, ln 9). The end portions 76, 78 extend at a 45° angle to the longitudinal and on opposite sides of the axis (p4, ln 1-6). Figures 11 and 13 show the alternate arrangement of the rules as claimed (Fig. 11, p. 9, ln 3-15). The terminating ends 84 of the rule are illustrated best as seen in Figures 10 and 12. As shown the end portions are integral with the steel member.

The economies of the present invention are realized because only identical steel rules need be used(in the case of square dies) to construct the entire steel rule die and these steel rules can be obtained as off the shelf items. With other rectangular shaped dies identical rules of two different lengths need be used. This obviates the need for a skilled die maker as where a die with rounded corners is desired and has the advantage of producing a stronger and more durable corner on cut substrate than that produced by dies designed to cut square corners.

Figure 13 is an illustrative example of an assembly of steel rules made in accordance with the teachings of the present invention and identified by the reference

numerals 70A and 70B (p7, lns 19-20; p8, lns 1-3; 5, lns 16-19; p9 lns 3-17) to produce a steel rule die 26 in accordance with the invention. This illustrates that identical steel rules may be used throughout with the exception if the cutting perimeter is to be other than square, the length of the rules in one direction would be different than in the other direction. This figure illustrates how the ends of adjacent rules engage each other and Figure 12 shows this engagement in much more detail (p10, lns 8-9).

In addition Figure 13 illustrates how the engagement of the rules creates the so-called inside corner 86(See Figure 11)(p9, ln 13- p10, ln 7) in which is located the cylindrical ejection rubber 90 which is used to eject cut pieces of substrate from the die. As described in the specification when the press comes closed the cylindrical shaped ejection rubber is squeezed into the square configuration to prevent cut substrate from being lodged in corners between the round and square configurations and when the press comes open the ejection member again assumes its cylindrical shape pushing cut pieces out of this configuration(p 13, lns 5-7).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

ISSUES

Issue 1. Did the Examiner correctly reject Claims 14-17, 20-22 and 23 under 35 USC 102(b) as being anticipated by Johnson (5,676,032).

Issue 2. Did the Examiner correctly reject Claims 14-15, 17, 20, 21 and 23 under 35 USC 102(b) as being anticipated by Jones et al. (3,826,170).

Issue 3. Did the Examiner correctly reject Claims 14-15, 17, 20-21 and 23 under 35 USC

102(b) as being anticipated by Williamson (2,860,555).

Issue 4. Did the Examiner correctly reject Claims 20-21 and 23 under 35 USC 102(b) as being anticipated by Svendsen et al. (3,464,293).

Issue 5. Did the Examiner correctly reject Claims 7-8 under 35 USC 103(a) as being unpatentable over Svendsen et al. (3,464,293) in view of Sandford (6,085,625).

Issue 6. Did the Examiner correctly reject Claims 7-8 and 10 under 35 USC 103(a) as being unpatentable over Johnson (5,676,032) in view of Sandford (6,085,625) and Jones et al. (3,826,170).

Issue 7. Did the Examiner correctly reject Claim 9 under 35 USC 103(a) as being unpatentable over Svendsen et al. (3,464,293) in view of Sandford (6,085,625) as applied to Claims 7 and 8 above, and further in view of Simms et al. (3,335,628).

Issue 8. Did the Examiner correctly reject Claim 10 under 35 USC 103(a) as being unpatentable over Svendsen et al. (3,464,293) in view of Sandford (6,085,625) and Simms et al. (3,335,628) as applied to Claims 7, 8, and 9 above, and further in view of Brayton et al. (5,943,935).

Issue 9. Did the Examiner correctly reject Claim 9 under 35 USC 103(a) as being unpatentable over Johnson (5,676,032) in view of Sandford (6,085,625) and Jones et al. (3,826,170) as applied to Claims 7 and 8 above, and further in view of Simms et al. (3,335,628).

Issue 10. Did the Examiner correctly reject Claims 11-13 under 35 USC 103(a) as being unpatentable over Williamson (2,860,555) in view of Sandford (6,085,625).

Issue 11. Did the Examiner correctly reject Claims 18, 19, 24 and 25 under 35 USC 103(a) as being unpatentable over Johnson (5,676,032) in view of Simms et al. (3,335,628).

Issue 12. Did the Examiner correctly reject Claims 18 and 24 under 35 USC 103(a) as

being unpatentable over Jones et al. (3,826,170) in view of Simms et al. (3,335,628).

Issue 13. Did the Examiner correctly reject Claims 18, 19, 24 and 25 under 35 USC 103(a) as being unpatentable over Williamson (2,860,555) in view of Simms et al. (3,335,628).

Issue 14. Did the Examiner correctly reject Claim 22 under 35 USC 103(a) as being unpatentable over Svendsen et al. (3,464,293).

Issue 15. Did the Examiner correctly reject Claim 24 under 35 USC 103(a) as being unpatentable over Svendsen et al. (3,464,293) as applied to Claims 20 and 23 above, and further in view of Simms et al. (3,335,628).

Issue 16. Did the Examiner correctly reject Claim 25 under 35 USC 103(a) as being unpatentable over Svendsen et al. (3,464,293) in view of Simms et al (3,335,628) as applied to Claims 20, 23 and 24 above, and further in view of Brayton et al. (5,943,935).

GROUPING OF THE CLAIMS

In the rejection of Claims 7-25 applicant takes the position that Claims 7, 9, 11, 14, 16, 18, 20, 22 and 24 stand or fall on their own. Claim 8 stands or falls with 7; Claim 10 stands or falls with 9; Claims 12 and 13 stand or fall with 11; Claims 15 and 17 stand or fall with 14; Claim 19 stands or falls with 18; Claims 21 and 23 stand or fall with 20; and Claim 25 stands or falls with 24.

ARGUMENT

Applicant disagrees with the Examiner's position that the references cited either singly or in combination disclose or teach the advantages of the invention disclosed and claimed in this application. As applicant has pointed out, he has made a disclosure wherein a single (in the case of square die configurations) or at most two steel rules(in other

rectangular die configurations) which can be off the shelf items, can be used to create an entire die by simply arranging the novel steel rules by a relatively unskilled workman. The unique configurations at each end of the steel rules enables them to be arranged in end to end relationship to accomplish the making of a steel rule die which can be quickly and economically accomplished.

Indeed all of the references cited by the Examiner point out the novelty of the present disclosure which discusses the desirability of avoiding the use of a skilled and expensive die maker to construct dies with curved or rounded configurations. None of the references disclose or suggest the use of identical steel rules of a construction that allows them to be arranged in end to end relation to produce a completed die. This with only off the shelf components. The references used by the Examiner illustrate curved constructions which cannot be put together with off the shelf parts.

Issue 1

Issue 1 is the rejection of Claims 14-17, 20-22 and 23 under 35 USC 102(b) as anticipated by Johnson.

Claim 14

To the extent that applicant understands the rejection it is disagreed with. The structure the Examiner is apparently referring to in Johnson (Fig. 7 and 8, items 9-10) is not a single rule but rather two rules. This type of structure is that used in making steel rule dies which are to cut substrate with curved or rounded corners and which require a very skilled and experienced die maker to construct. See page 1, line 18 through page 2,

line 11 of the present disclosure where this is discussed. Clearly no structure found in Johnson can be arranged to come up with the structure found in Claim 14 for example or any of the claims that are dependent thereon. In the office action of March 8, 2002 the Examiner conceded there is no suggestion in Johnson for a second adjacent steel rule and since the ends of the rule shown in Johnson both extend in the same direction they could not possibly be combined as found in the claim.

The Examiner in his use of the Johnson reference maintains that it shows a steel rule 4 which has first and second portions that extend at approximately a 45 degree angle (See Johnson's item 9 and 10 shown in Figure 7) and in first and second direction and the steel rule engaging the next adjacent steel rule to form approximately at 45 degree angle and then previously invited attention to Figure 2A of Johnson (see action dated October 13, 2004).

An examination of Johnson reveals it teaches a steel rule die for cutting a plurality of fixed patterns in accord with the shape of the steel rule. The invention has to do with reducing the quantity of scrap produced by minimizing the amount of gap between adjacent cavities in the steel rule cutting die.

The cavities of Johnson are shown in Figures 1A and 2A with the cavities identified by reference numeral 2. There are 17 cavities shown in Fig. 1A and 20 cavities shown in Fig. 2A. Reference may be had to claim 1 and Figures 3 and 4 to obtain the gist of the Johnson disclosure.

Figures 7 and 8 of the Johnson disclosure which the Examiner uses in his rejection

(see column 8 lines 5-23) is simply a disclosure of welding two steel rules 9 and 10 together so as to eliminate the gap between rules and then eliminate some of the scrap in use of a die.

Items 9 and 10 in Figure 7 of Johnson are clearly two separate steel rules which have been welded together so as to eliminate the gap referred to above and do not meet the terms of claim 14 or any of the claims under this issue 1. The disclosure of Johnson including Figure 7 does not teach or show the steel rules of the claims including the longitudinal axis and the end portions which extend at an angle to the axis and on opposite sides of the axis.

Claim 16

All of the discussion and argument given immediately above in respect to Claim 14 applies equally well as an argument for the allowance of Claim 16. Claim 16 is more specific than Claim 14 and describes in more detail the structure of the rules to be arranged in end to end relationship to form a steel rule die as illustrated in the drawings i.e. Figures 2, 11, and 13. These specific recitations of the nature of the end portions and their extent of 45 degrees makes the claim separately patentable over Claim 14 and the reference. Clearly Johnson does not disclose or suggest the steel rule claimed in Claim 16. Claims 15 and 17 stand or fall with Claim 14.

Claim 20

Claim 20, when properly interpreted in accord with Markman standards is not anticipated by Johnson. Claim 20 defines the rule of the present invention and particularly its first end portion which extends at an angle and in a first direction so that it can be arranged with a like rule to produce a corner in a die without the need of an expensive die maker as discussed above.

When the meaning of the claim is properly interpreted there cannot be found in Johnson the structure of the claim to accomplish the intended results. The discussion and argument given in support of the allowance of Claim 14 are appropriate for the argument of this claim and are incorporated by reference. This claim is separately patentable over Claim 14 and the reference for example in that it is broader and describes specifically one end of the rule. Claims 21 and 23 stand or fall with Claim 20, however the argument for their allowance is the same as for Claim 20 and Claim 22.

Claim 22

Claim 22 when properly interpreted is not anticipated by Johnson. All of the arguments given in support of the allowance of Claims 14 and 20 are appropriate for the allowance of Claim 22 and are hereby incorporated by reference. Claim 22 is separately patentable over Claim 20 and the reference in that it is narrower and more specific because the end portion is integral with and not separate from the steel member. The specific recitation of the extent being at 45 degrees enables the corners to be formed as shown in Figures 11 and 13.

ISSUE 2

This issue is the rejection of Claims 14-15, 17, 20, 21 and 23 under 35 USC 102 (b) as anticipated by Jones et al.

Claim 14

The structure in Jones (Figs 13-18) used by the Examiner is described by Jones for example in connection with Fig. 13 at col. 7 ln. 50 - col.8 ln. 29. This construction includes cutter blade segments SL1-SL6 arranged in the configuration of a jacket front to be cut from suitable cloth which segments are connected together at their ends by cutting blade segments P1-P6. Magnets 53 are said to be used to hold the segments together. In short the segments P1-P6 are

corners for the other segments.

The Examiner uses the structure P2 of Jones to anticipate the claims of this issue. No apparent regard has been given as to how a workman would take a plurality of the structures P2 and arrange them in end to end relationship to make an inexpensive steel rule die. Applicant maintains that one could not.

If one carefully examines the claims the extent of the metal member should be given the meaning ascribed to it from the specification and then the meaning of the words first and second directions will be clear. If this is done the claims, and particularly claim 14, are clearly not anticipated by Jones. Jones has no "extent" to his corner members and even if one theoretically argues that he does, then his end portions extend the same direction as for example in the Johnson reference discussed in Issue 1. Claims 15 and 17 stand or fall with Claim 14 and the argument for their allowance is the same as for claim 14.

Claim 20

All of the arguments for the allowance of Claim 14 and why the claim is not anticipated by Jones et al apply here and are incorporated by reference. Claims 21 and 23 stand or fall with Claim 20 however the argument for their allowance is the same. This claim is separately patentable over Claim 14 and the reference in that it is broader and describes specifically one end of the rule.

ISSUE 3

This issue is the rejection of Claims 14-15, 17, 20-21 and 23 under 35 USC 102(b) as anticipated by Williamson.

Claim 14

Applicant is uncertain of the portion of Williamson the Examiner uses to show the metal

member which is said to extend at a 45°angle and then another end that extends at approximately 90°. It will be assumed by Applicant the structure used in the anticipation is some or all of the elements 28, 29, 30 and/or 31.

Applicant is unable to find in Williamson, the structure of a steel rule which has its ends extending in first and second directions opposite to the extent of the metal member. For at least these reasons the Claim 14 is not anticipated. The claimed subject matter brings about Applicants inventive results which cannot be attained by Williamson. Claims 15 and 17 stand or fall with Claim 14 however they are allowable for the same reasons as claim 14.

Claim 20

All of the arguments for the allowance of Claim 14 and why it is not anticipated by Williamson apply here and are incorporated by reference. Claims 21 and 23 stand or fall with Claim 20 however the argument for their allowance is the same. Claim 20 is separately patentable over Claim 14 for example in that it is broader and describes specifically one end of the rule.

ISSUE 4

This issue is the rejection of Claims 20-21 and 23 under 35 USC 102(b) as being anticipated by Svendsen et al.

Claim 20

The Examiner points to Figure 20 of Svendsen et al. as anticipating the claims. Svendsen et al. discloses no more than Johnson as discussed in Issue 1. The arguments given regarding Issues 1, 2, and 3 are relevant to Issue 4 and are incorporated into this argument against the rejection found in Issue 4. These claims define the first end portion and its angular relationship so it can be arranged with another rule. Claims 21 and 23 stand or fall with claim 20 and are allowable for the same reasons.

Svendsen et al does not cut substrate with square corners but rather with rounded corners which requires a skilled and expensive die maker.

ISSUE 5

This issue is the rejection of Claims 7 and 8 under 35 USC 103(a) as being unpatentable over Svendsen et al. in view of Sandford.

Claim 7

The patentability and novelty of the presently claimed invention could not be demonstrated more clearly than by reviewing Svendsen et al. and comparing it with the advantages of the present disclosure. Svendsen does not cut substrate with square corners but rather with rounded corners with the necessity of using a skilled die maker to make the curved construction shown in Svendsen's Figures 2 and 3. There cannot be found in Svendsen most of the structure recited in Claims 7 and 8. There cannot be found the recited steel rules with the 45° ends which are arranged alternately with each other to make the die. Please refer to the "Summary of the Invention" portion of this brief which points out the advantages of the present disclosure as compared to most of the art cited in this case and particularly Svendsen and Sandford. Sandford's plate 52 is not the plate of the claim. See Figures 5A and 5B of Sandford where the plate 52 has a slot which extends clear through which does not provide support against force on the cutting edge of the rule 20. Claim 8 stands or falls with claim 7 and is allowable for the same reasons.

ISSUE 6

This issue is the rejection of Claims 7-8 and 10 under 35 USC 103(a) as being unpatentable over Johnson in view of Sandford and Jones et al.

Claim 7

Johnson has been discussed at length in Issue 1 and Jones et al. in Issue 2. These

arguments are incorporated by reference into these arguments against the rejection of Issue 6. Sandford adds little or nothing to the rejection of the claims. Sandford concededly shows a metal plate 52 but does nothing to make obvious the claimed combination. As pointed out in Issue 5, Sandford's plate does not support the bottom of the rule against force exerted on the rule cutting edge.

Applicant submits that if you combine Johnson, Sandford and Jones et al. you do not arrive at a construction where a die can be made by an unskilled worker with off the shelf steel rules having oppositely extending 45° ends arranged alternately with one end of one rule engaging the other end of another rule.

Claim 8 stands or falls with claim 7 and is allowable for the same reasons as claim 7.

Claim 10 stands or falls with claim 9 as argued in Issue 7 and is allowable for all the reasons argued for the claims from which it depends.

ISSUE 7

This issue is the rejection of Claim 9 under 35 USC 103(a) as being unpatentable over Svendsen et al. in view of Sandford as applied to Claims 7 and 8 above, and further in view of Simms et al. The above refers to Issue 5.

Claim 9

The discussion and argument regarding Svendsen et al. and Sandford has been treated in Issue 5 and are incorporated by reference herein with these arguments.

Regarding Simms et al. it would appear that Claim 9 differentiates not only because of the combination recited but because the recited structure is at the first and second end portions of the rule. See Figure 12 of the disclosure. Claim 9 is not obvious. There is nothing in Simms which would suggest combining steel rules in end to end relationship to form a corner where the cutting

edge extends a greater distance than other portions.

ISSUE 8

Issue 8 is the rejection of Claim 10 under 35 USC 103(a) as being unpatentable over Svendsen et al. in view of Sandford and Simms et al. as applied to Claims 7, 8 and 9 above and further in view of Brayton et al. The "above" is assumed to be the rejections found in the discussion of Issues 5 and 7.

Claim 10

It should be noted that Applicant has indicated in the "Grouping of the Claims" section of this brief that Claim 10 stands or falls with Claim 9. The arguments given in the discussion of Issues 5 and 7 are incorporated herein by reference and will not be repeated here. Applicant does not dispute that Brayton et al. shows slots in the bottom of a rule but not in the combination recited in Claim 10. Claim 10 is allowable as well as the claims from which it depends.

ISSUE 9

This issue is the rejection of Claim 9 under 35 USC 103(a) as being unpatentable over Johnson in view of Sandford and Jones et al. as applied to Claims 7 and 8 above, and further in view of Simms et al. The "above" is presumed to be the rejection discussed in Issue 6.

Claim 9

The arguments given in Issue 6 regarding Johnson, Sandford and Jones et al. are incorporated into this argument and will not be repeated here. Simms et al. was discussed in Issue 7 and the same arguments are incorporated herein for the allowance of Claim 9 and against the rejection. It is submitted Claim 9 is not obvious.

ISSUE 10

This issue is the rejection of Claims 11-13 under 35 USC 103 as unpatentable over

Williamson in view of Sandford.

Claim 11

Williamson was discussed in Issue 3 and the arguments given there are incorporated by reference herein.

An examination of these claims and particularly claim 11 reveals they recite steel rules having first and second end portions with the first end portion extending at approximately a 45°angle and engaging a next adjacent steel rule to form a 45° degree angled corner. Williamson in Figure 1 shows a myriad of configurations none of which teach of Applicant's claimed invention. The gist of the rejection appears to be where the Examiner notes that the 45° degree corner is "where the rule 40 engage(s) the straight rule" in Figure 4. The rejection is wrong because the Examiner misconstrues the meaning of the claim language and particularly the engaging of the steel rules. Claims 12 and 13 stand or fall with claim 11. As pointed out in Issue 5 the plate 52 of Sandford is not the plate of the claims for the reasons given.

ISSUE 11

This issue is the rejection of Claims 18, 19, 24 and 25 under 35 USC 103(a) as being unpatentable over Johnson in view of Simms et al.

Claim 18

Johnson has been discussed in the argument in Issues 1, 6, and 9 and Simms et al. in Issues 7, 8 and 9. Applicant's arguments and discussion given in these issues are incorporated by reference herein. It will be noted that Claim 19 stands or falls with Claim 18 and Claim 25 stands or falls with claim 24.

Johnson of course shows none of the structure of Claim 18 and the Examiner uses Simms et al. as meeting this language. Simms fails to suggest where and how his structure might be

incorporated into Johnson to meet the claim language. Additionally Simms et al. does not meet, show or suggest the limitation of the terminating ends of the first and second end portions when they are properly construed.

It is submitted the claims of Issue 11 are not obvious. It should be kept in mind for example in Claim 18 that the claim refers to the terminating end of each of the first and second end portions formed on an angle to the vertical. There are not two ends in Simms et al. of this construction as called for in the claim 18. Claim 19 is allowable for the same reasons as claim 18.

Claim 24

This claim patentably differentiates over Johnson for the reasons given above and over Simms et al because there is nothing in Simms et al which would suggest combining steel rules in end to end relationship to form a corner where the cutting edge thereat extends a greater distance than the other portions. Claim 25 stands or falls with Claim 24 and is allowable for the same reasons.

ISSUE 12

This issue is the rejection of Claims 18 and 24 under 35 USC 103(a) is unpatentable over Jones et al. in view of Simms et al.

Claim 18

Issue 11 discusses Claims 18 and 24 which involves Johnson as the primary reference in view of Simms et al. as the secondary reference. Issues 2, 6 and 9 discuss Jones et al. at length and Issues 7, 8 and 9 discuss Simms et al. All of these discussions and arguments are incorporated by reference herein and against this rejection.

Claim 18 is urged to be allowable at least on the basis of the claims from which it depends. Applicant disagrees that Jones et al. discloses the invention substantially as claimed. In Issue 2

Jones et al. is discussed at length as well as in Issues 6 and 9. These arguments are incorporated into the arguments on this issue. The structure P2 in Jones et al. simply cannot meet the claim language because they cannot be put together end to end to form an inexpensive steel rule die. Simms et al. does not contribute to the rejection because the structure in question is at the ends of steel rules which can be placed end to end to construct an inexpensive steel rule die.

Claim 24

This claim patentably differentiates over Jones et al because as pointed out above the structure P2 in the reference cannot meet the claim language because they cannot be put together end to end to make an inexpensive steel rule die. Simms et al does not contribute to the rejection because of the lack of suggestion of where to put the Simms et al structure in the Jones et al structure. Claims 18 and 24 are patentably different from each other in that they depend from different definitions of the steel rule.

ISSUE 13

This issue is the rejection of Claims 18, 19, 24 and 25 under 35 USC 103(a) as being unpatentable over Williamson in view of Simms et al.

Claim 18

Williamson has been discussed in Issues 3 and 10 and Simms et al. has been discussed in Issues 7, 8, 9 and 12. All of these arguments are incorporated herein by reference for the allowance of these claims. As discussed in Issue 3 Williamson would not appear to teach a steel rule which has its ends extending in first and second directions opposite the extent of the rule. As discussed before, Simms et al. does not show the recited structure at the end of the member so that a plurality can be arranged in end to end relationship to produce a die as called for in claim 18. Claim 19 is allowable for the same reasons as claim 18.

Claim 24

As discussed above, Williamson does not teach a rule having a first end portion extending at an angle to the extent of the metal member so that rules can be arranged in end to end relationship to form a corner in a steel rule die. Simms et al does not suggest where and how it is to be combined to meet the structure of the claim. It does not suggest the combining of rules in end to end relationship to form a corner where the cutting edge thereat extends a greater distance than the other portions. Claim 25 stands or falls with Claim 24 and is allowable for the same reasons.

ISSUE 14

This issue is the rejection of Claim 22 under 35 USC 103(a) as being unpatentable over Svendsen et al.

Claim 22

This reference has been discussed and argued against in Issues 4, 5, 7 and 8 and these arguments are incorporated herein by reference into this issue.

Applicant disagrees that Svendsen et al. discloses the invention except for an approximately 45 degree angle. This reference teaches of bending a rule to a sharper bend than is conventionally possible by using a secondary device shown in Figure 5 to force the rule into a sharp bend at the bend point. In Svendsen the wedge 40 in Figure 7 is urged to Figure 8 position to produce Figure 9. To state that Svendsen et al. teaches a range between 0 to 90 degrees and say this includes 45 degrees and therefore renders the claims obvious is nothing short of ludicrous. There is nothing in Svendsen et al. that teaches the claimed structure so that two of the rules can be assembled to produce a 45 degree corner. This claim is not obvious.

ISSUE 15

This issue is the rejection of Claim 24 under 35 USC 103(a) as unpatentable over Svendsen et al. as applied to Claims 20 and 23 above, and further in view of Simms et al.

The above is assumed to be the rejection discussed in Issue 4. The discussion and argument in Issues 4 and 14 are incorporated by reference into this argument.

Claim 24

Applicant disagrees that Svendsen et al. substantially discloses the invention except for the terminating end portions. Simms et al. does not add to Svendsen et al because there is no suggestion of how they are to be combined. These two references do not teach how two of the claimed rules can be combined to produce a 45 degree corner.

ISSUE 16

This issue is the rejection of Claim 25 under 35 USC 103(a) as being unpatentable over Svendsen et al. in view of Simms et al. as applied to Claims 20, 23 and 24 above, and further in view of Brayton et al.

Claim 25

Applicant assumes the referred to "above" is the rejection in Issue 15. These previous arguments given in Issues 4 and 15 are incorporated by reference into this argument.

Applicant disagrees that Svendsen et al. substantially shows the invention as discussed above in Issue 4. It will be noted that Claim 25 is said to stand or fall with Claim 24. Applicant does not take the position that slots in the bottom of a steel rule per se is novel and patentable. It is patentable in the recited combination.

SUMMARY AND CONCLUSION

The Examiner's rejection of Claims 7-25 has used sixteen (16) rejections utilizing some seven (7) references. In most of the rejections the Examiner indiscriminately picks and chooses

parts from the references and puts them together to his own liking and then in conclusory fashion states that a claim is anticipated or obvious. No attempt appears to have been made to properly interpret the claim language and then apply the teachings of the claim to the references. In these combination rejections there is a deficiency in pointing out where the art teaches or suggests the alleged combination.

In respect to the prior art cited Applicant would make the following comments:

1. Johnson does not illustrate a single steel rule but rather two (2) single bevel rules (9,10) placed back to back (Fig.8) and held together by welding, soldering, brazing or riveting to eliminate the gap between the cavities. This combination in Johnson cannot be constructed by other than skilled die makers, is curved rather than having ends that extend in opposite 45° angles and cannot be arranged end to end to make a die by an unskilled workman.

2. The corner connecting members P1 etc. in Jones et al. which are used to connect members SL1, SL6 etc. together (See Fig.13) do not teach or suggest of the present invention and clearly do not have ends which extend in opposite directions. The members P1 cannot be connected in end to end arrangement to construct an inexpensive steel rule die.

3. Williamson is the teaching of making block dies. Referring to Figure 1 of this reference it will be seen that the die can cut and score to produce boxes of different dimensions. In order to change the size of the box produced one varies the length of rules Wi and Li. Applicant does not know where the angles are the Examiner refers to in his rejections. Clearly this reference does not teach how to make a die by an unskilled worker by arranging steel rules of the present disclosure in end to end relationship.

4. Svendsen et al. appears to be a teaching of how to produce a sharper bend in a steel rule than is conventionally possible by use of the construction shown in Figure 5. The Examiner's

reference to Fig. 20 in this art is nothing more than is shown in Johnson discussed above. It is not possible to produce an inexpensive die by arranging pieces like those shown in Fig. 20 in end to end relationship.

5. Sandford is cited (Item 52) as showing a plate for the purpose of increasing the stability of the rule die. The plate 52 shown in Sandford does not support the bottom of the steel rule shown therein. Reference may be had to Sandford's Figures 5A and 5B which show the plate 52 as having a slot extending entirely through it and which does not engage or support the bottom of the rule.

6. Simms et al. used in some of the combination rejections shows a means of connecting the ends of a continuous strip of steel rule which has curved or arcuate corners. This construction is not used in the claimed combination of the present application.

7. Applicant does not dispute that Brayton et al. show slots in the bottom of a steel rule. It appears the grooves 36 are for the purpose of receiving the inner rails 34 and giving space therefore and not necessarily to obtain better support of the steel rule (See col. 6 lns. 23-36).

The Examiner's rejection of January 12, 2005 should be reversed.

FEE

A check in the amount of $150.00 for filing a brief in support of an appeal pursuant to 37 CFR Section 1.17(c) was included with the filing of the original Appeal Brief. Please charge Woodling, Krost and Rust deposit account No. 23-3060 for any additional fees required. This brief is being filed in triplicate.

Respectfully submitted,

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant: Henry H. Jenkins

Examiner: O. Flores Sanchez

Art Unit: 3724

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For: STEEL RULE DIE AND STEEL RULE

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APPENDIX

7. A steel rule die including in combination

a metal plate,

a top board located on top of said metal plate,

a plurality of rule slots in said top board,

a steel rule in said slots,

each of said steel rules being generally flat to fit in a slot and having a bottom portion adjacent said metal plate and a top portion formed into a cutting edge residing above the surface of said top board,

each said steel rule extending on a longitudinal axis and having first and second

end portions,

said first end portion extending at approximately a 45° angle to said longitudinal axis and on one side of said axis,

said second end portion extending at approximately a 45° angle to said longitudinal axis and on another side of said axis,

said steel rules in said rule slots being arranged alternately with said first end portion of a given rule located adjacent said second end portion of a next rule adjacent said given rule.

8. A steel rule as claimed in claim 7 wherein said cutting edge is defined by a generally triangular shaped configuration.

9. A steel rule die as claimed in claim 8 wherein the terminating end of each of said first and second end portions of said steel rule is formed on an angle to the vertical whereby the cutting edge thereat extends axially a greater distance than other portions of the terminating end.

10. A steel rule die as claimed in claim 9 wherein slots are formed extending from said bottom position into said steel rule to support said steel rule.

11. A steel rule die including in combination

a metal plate,

a top board located on top of said metal plate,

a plurality of rule slots in said top board,

a steel rule in said slots,

each of said steel rules being generally flat to fit in a slot and having a bottom portion adjacent said metal plate and a top portion formed into a cutting edge residing above the surface of said top board,

each said steel rule extending on a longitudinal axis and having first and second end portions,

said first end portion extending at approximately a 45° angle to said longitudinal axis and on one side of said axis,

said first end portion of a given steel rule engaging a next adjacent steel rule to form a 45° angled corner.

12. A steel rule as claimed in claim 11 wherein said cutting edge is defined by a generally triangular shaped configuration.

13. A steel rule die as claimed in claim 12 wherein slots are formed extending from said bottom portion into said steel rule to support said steel rule.

14 A rule for use in a steel rule die including a metal member having upper and lower edge portions and first and second end portions,

said first end portion extending at an angle to the extent of said metal member and in a first direction,

said second end portion extending at an angle to the extent of said metal member and in a second direction,

said upper edge portion having a cutting edge formed thereon.

15. A rule as claimed in claim 14 wherein said rule is steel and is generally flat in

configuration.

16. A steel rule as claimed in claim 15 wherein said first and second end portions are integral with said steel member and each formed at approximately a 45° angle to the extent of said steel member and in a direction opposite to each other.

17. A steel rule as claimed in claim 15 wherein said cutting edge is defined by a generally triangular shaped configuration.

18. A steel rule as claimed in claim 17 wherein the terminating end of each of said first and second end portions is formed on an angle to the vertical whereby the cutting edge thereat extends axially a greater distance than other portions of the terminating end.

19. A steel rule as claimed in claim 18 wherein slots are formed extending from the lower edge portion into said steel member to support said steel rule when used in a steel rule die.

20. A rule for use in a steel rule die including a metal member having upper and lower edge portions and first and second end portions,

said first end portion extending at angle to the extent of said metal member and in a first direction, and

said upper edge portion having a cutting edge formed thereon.

21. A rule as claimed in claim 20 wherein said rule is steel and is generally flat in configuration.

22. A steel rule as claimed in claim 21 wherein said end portion is integral with said steel member and is formed at approximately a 45° angle to the extent of said steel

member.

23. A steel rule as claimed in claim 21 wherein said cutting edge is defined by a generally triangular shaped configuration.

24. A steel rule as claimed in claim 23 wherein the terminating end of said first end portion is formed on an angle to the vertical whereby the cutting edge thereat extends axially a greater distance than other portions of the terminating end.

25. A rule as claimed in claim 24 wherein slots are formed extending from the lower edge portion into said steel member to support said steel rule when used in a steel rule die.